Road and rail infrastructure accounting in The Netherlands

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Introduction

This study aims to give an overview of the existing road and rail infrastructure accounting and charging schemes in The Netherlands. In section 1, the current situation concerning expenditures and costs for road and rail will be elaborated. Section 2 describes current and planned infrastructure charging schemes for road and rail. Finally, in section 3, the extent to which rail transport has been liberalised in The Netherlands is discussed.

1. Current situation concerning expenditures, costs, revenues and balances for road infrastructure in The Netherlands

In The Netherlands various types of statistical information are available on road expenditures and costs. In general, two main sources of data exist, which can fulfil the need to obtain information concerning road costs. These will be discussed in the first subsection. The second subsection will describe the funding sources for these road expenditures related to traffic; like fuel taxes.

1.1 Road costs

In the first place there is a yearly publication of the Ministry of Transport, Public Works and Water Management (TPWM): the so-called MIT (a programme of investments in the infrastructure for the next four years, the Multi-year Infrastructure and Transport Programme). This publication provides each year an extensive overview of all investment projects in infrastructure for the comming years. Important to mention is that the publication is limited to projects paid by the State government, so investments of local authorities (in The Netherlands provinces, polders and municipalities) cannot be found in this programme. The MIT is aimed at future developments concerning construction of various projects. The State government makes clear which investments will be realised including a time schedule for realisation. The MIT investment plan ends with an indicative overview of (planned) revenues and expenses for the following years concerning state roads. The revenues to fund the expenses for infrastructure are mainly extracted from the so-called Infrastructure Fund. It would be too complicated to describe here the underlying funding mechanisms of this Infrastructure Fund. It can be said that part of the revenues discussed in subsection 1.2 will be dedicated to this Fund. So we mention here only the planned expenses concerning national highways (State roads, see table 1).

Table 1: Planned expenses for national roads, in million Dutch guilders.

	1999	2000	2001	2002
Expenses for State roads	2808	2755	2954	2888

Source: Ministry of Transport, Public Works and Water Management, 1999.

The second source of information is data from Statistics Netherlands (CBS). This governmental organisation collects, interprets and presents (statistical) information

about the Dutch society. Two statistical sources have to be mentioned here, namely the "Costs of ground-, water- and road construction" and the "Expenses made for road infrastructure".
The data in the first statistical source (ground-, water- and road construction) is divided into different categories. The interesting category concerning road costs is called Road Traffic. It encloses infrastructural works including roads for bicycles, pedestrians and supplementary provisions. A distinction can be made between expenses done by national government, local authorities and private firms. On the other hand total costs are allocated to small maintenance (expenses for material fixed goods which will not lengthen the initial life and/or increase prod. cap.) and capital works (new roads, reconstruction, replacement and large maintenance). This information over the years 19951997 is presented in table 2.

Table 2: Overview of costs made for road traffic, in million Dutch guilders.

	1995			1996			1997		
	Total	SM	C	Total	SM	CW	Total	SM	CW
National government	1653	570	1083	1937	627	1310	1728	563	1165
Private firms	26	7	18	27	10	18	31	11	20
Local authorities	2478	1022	1456	2595	1024	1572	2630	918	1712
Netherlands	4157	1599	2558	4560	1661	2899	4389	1492	2897

SM = small maintenance, CW = capital work
Source: CBS, 1999

The second source provides us with some statistics concerning road expenditures, namely the expenses for road infrastructure (see table 3). Three categories are distinguished here: investments (mainly formed by the construction of new roads), maintenance (not value adding activities) and capital costs (costs of interest). The data is provided by the various authorities and does not contain one general interest rate. Each authority uses its own rate of interest. The hypothecation of the expenses to goods transport is made by the institute called Transport and Logistics Netherlands.

Table 3: Overview of expenses made for road infrastructure (total and the share of freight transport infrastructure), in million Dutch guilders.

Expenses for road infrastructure (national and local authorities)	1995	1997 (estimation)	1995 (freight)	1997 (freight) (estimation)
Investment	3.314	3.358	546 (16%)	628 (19%)
Maintenance	3.726	3.716	638 (17%)	665 (18%)
Interest costs	1.487	1.415	254 (17%)	259 (18%)
Total	8.527	8.848	1.438 (16,8%)	1.552 (17,5%)

Source: CBS, 1999 and Transport en Logistiek Nederland, 1999.

These expenses differ with the figures mentioned in table 1; but the figures in table 1 are only referring to national roads and mainly investment expenses. The figures of

table 3 differ significantly with costs mentioned in table 2. These differences are difficult to explain even for the governmental organisation Statistics Netherlands. They are aware of these differences but are not able to give a good clarification (not only due to various used definitions). Note that interest costs are included in table 3.

12 Revenues for roads related to traffic

It is not common in The Netherlands to hypothecate taxes to the funding of various costs of roads. The government (national as well as local) normally finances roads from the public budget. However this does not mean that there are no taxes related to traffic on these roads. The existing forms of taxes will be described here, followed by an overview of the revenues collected with these sources.

1.2.1 Vehicle taxation

There are three different forms of vehicle taxation; a registration tax, a circulation tax and taxes on vehicle use. These will be shortly discussed in this subsection.
First, a registration tax is levied on all new passenger cars and motorcycles, when they are purchased for the first time. It is calculated on the net list price, including profit margins but exclusive of taxes:

- Petrol engine 45.2 per cent of the net list price minus 3,394 Dutch guilders;
- Diesel engine 45.2 per cent of the net list price minus 1,278 Dutch guilders.

The purchase of private cars and commercial vehicles are subject to the normal rate of VAT, which currently stands at 17.5%. The tax base does not include taxes.
Next, a circulation tax is levied *on all cars* every three months. The amount of circulation tax depends on the type of vehicle, its dead-weight, the type of fuel used and the region. However, the road tax on commercial vehicles does not differ between regions.
Thirdly, fuel taxes are levied. Three different types of tax apply to fuel: the excise duty, an environmental tax', and a tax on the stock[2]. The total level (in Dutch guilders per litre) of taxation is presented in table 4.

Table 4: The total level of taxation (in Dutch guilders per litre)

Fuel type	Excise	COVA-levy	WBM
Leaded petrol	1.26	0.012	0.02
Unleaded petrol	1.12	0.012	1.16
Diesel	0.66	0.012	0.697
LPG	0.08	0	0.033
Natural gas	0	0	0.08
Biofuels			

Source: Unconventional forms of charging and taxation to fund public transport (Oscar Faber, 1999, unpublished)

In addition all motor fuels are subject to VAT at the standard rate of 17.5%.

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[1] WBM – energy and carbon dioxide tax where the rates are based on carbon (50%) and energy (50%) content.
[2] COVA – to finance emergency stockpiles.

1.2.2 Employee taxation

Company car

The private use of a company car is treated as a taxable benefit. The value of this benefit is 20% of the catalogue price, per year, which is added to the employee's taxable income. The amount added to an employee's income is increased to 24% of the catalogue price if commuting distance (one-way) is more than 30km. The amount decreases if:

- the employee pays an amount for private use of the car to the employer; or
- the employee pays and amount for commuting costs which is more than 70% of the reisenkostenvergoeding[3] which he or she could get.

The employee is not subject to income tax on the benefit if he/she can prove that he/she has not used the car for more than 1,000 kilometres per year for private purposes. There is no tax-free reiskostenvergoeding and no reiskostenforfait for company cars in commuting.

Commuting expenses

Next to the treatment of the company car, the Dutch government levies a tax on commuting expenses. If the employees do not receive reimbursement of commuting expenses from their employer, they are allowed to deduct these costs from their taxable income. However, tax deduction is disallowed if the employee lives within a radius of 10 km from work, and limited to a certain amount corresponding to a maximum distance from home to work of 30 km. The maximum rates for deduction vary according to mode of transport:

- *Private car:* The employee can write off between 860 and 2050 Dutch guilders depending on distance travelled.
- *Public transport:* If public transport is used for commuting, the rates of maximum deduction are increased. These rates start at 1150 Dutch guilders (>10 km) and go up to 5430 Dutch guilders (>80 km). The use of public transport is further stimulated by not applying the maximum 30-km distance as a limitation.
- *Bicycle:* Identical to the private car; expenses for use of the own vehicle is mentioned so the car is equal to the bicycle.

Employer provided commuting benefits

In general, commuting cost may be reimbursed tax-free by the employer if the distance between home and work is greater than 10 km and less than 30 km. Again, the rules for reimbursement depends on the mode of transport used for commuting.

- *Private car:* The employee can receive tax-free reimbursement from the employer of between 1,910 and 3,240 Dutch guilders depending on distance travelled.
- *Public transport:* A season ticket specific to the employee's trip from home to work can be provided by the employer tax-free to the employee even if he/she commutes only infrequently by public transport.
  If non-route specific ticket (e.g. a Travelcard) is provided, tax is payable on the private use value of the ticket. This value is 120 Dutch guilders per year for

[3] The taxation of travel to and from work in The Netherlands is centred around two crucial benefits: the reiskostenvergoeding (reimbursement from the employer of an employee's commuting costs, normally paid only to those who travel more than 10km one way); and reiskostenforfait, the allowance for travel costs paid by the employee which he/she can offset against tax. The degree to which the reiskostenvergoeding is taxable, and the size of the reiskostenforfait, both vary depending on the mode used.

second class and 180 Dutch guilders for first class for people who commute at least half the time by public transport. Infrequent users incur a higher tax liability. Next to this the employer is allowed to compensate the employer for 200 Dutch guilders (tax-free) when there is chain mobility (use of other entrance or exit modes in public transport chains).

- *Bicycle:* **If** an employee receives a bicycle worth less than 1,500 Dutch guilders from the employer, the employee is liable to tax on only a fixed amount of 150 Dutch guilders. The employer may also provide the employee with accessories such as insurance, clothing, lighting, et cetera up to a maximum of 550 Dutch guilders tax-free once every three years. If the employee borrows a bike from the employer there is no tax on the private use of the bicycle provided that it is used for commuting at least half the time. An employer may receive tax-free reimbursements from the employer for the use of his own bicycle for commuting for distances of more than 10 km, but not for shorter distances. Those employees that cycle more than 10 km and who cycle for more than half the year can also receive a tax-free reimbursement from the employer for using public transport on bad weather days. There is a favourable tax regime for so-called "bicycle projects", where the employer buys bicycles for employees and then recoups the cost through salary reductions.
- *Company cars:* There is no tax-free *reiskostenvergoeding* and no *reiskostenforfiait* when using a company car in commuting.
- *Commuting buses:* If these are provided free of charge to the employees then there is no tax liability for the employees. If the employees contributes to the cost of the commuting bus, this contribution is not deductible until it reaches 70% of the amount of travel costs that employee is allowed to offset against tax (the *reiskostenforfait*).
- *Car pooling:* A tax incentive exists for car-pooling. Under certain conditions, the employer may provide tax-free reimbursement for a carpooling car up to 0.57 Dutch guilders per kilometre. To qualify for fiscal benefits for car pooling, all participating employees must sign up to a car pool contract with each other and the employer, and must car pool more than half the time. They are then entitled to a higher tax-free reimbursement (between 500 and 1000 Dutch guilders per employee per year), though again the minimum distance applies.

Business travel

Reimbursements for the use of private cars for business purposes are tax exempt up to a level of 0.60 Dutch guilders per kilometre. Actual costs of public transport incurred in business travel may be reimbursed free of tax. Reimbursements for use of bicycles in business travel are tax exempt up to a level of 0.12 Dutch guilders per kilometre.

1.2.3 Business taxation

For company taxation purposes all costs incurred with respect to reimbursements of commuting costs are considered tax deductible. This includes the running costs of buses for commuters. Furthermore, an employer may offset the costs of bikes provided to employees against corporation tax.

Value Added Tax (VAT)

With the exception of a lump sum correction, VAT registered employers are entitled to deduct all VAT on the expenses incurred by the use of company cars for business purposes. VAT on the expenses incurred by private use is non-deductible. For

company taxation purposes, the rate for private use is calculated in the same way as for the personal income tax (20% or 24% of the catalogue value). The annual VAT in this case is calculated as: 12% (VAT deemed included in the costs) x 20% (or 24%) x the catalogue value.
The VAT on public passenger transport is non-deductible for employers reimbursing expenses incurred by commuting by public transport.
All VAT payable on bus transport organised by the employer is deductible.
An employer who provides a bicycle to employees is liable to pay the VAT on the bikes.

1.2.4 Overview of revenues

The transport sector contributes for 8% yearly to the Gross National Product (GNP) of The Netherlands. This underlines the importance of this sector for the national economy. One can imagine that road traffic is an important source of income for the Dutch government. It is estimated that in total 26 billion Dutch guilders in the form of (road) traffic taxes is flowing into the national budget in 1999 (see table 5). This is an increase of 36% in comparison with 1994. Examples from these taxes are the registration tax, the circulation tax and taxes on vehicle use.

Table 5: Revenues for the national government from traffic taxes (in million Dutch guilders)

Tax	Revenues in 1994	Revenues in 1999
Tax on vehicle ownership	3629	5100
Petrol excise	5667	7015
LPG and Diesel excise	3356	4625
Registration tax	4688	3860
Eurovignet		210
VAT*	1593	1649
Total	18933	25843

* new and used cars, fuel, maintenance, leasing and car rental.
Source: BOVAG, CBS (1999).

Next to this data, more country-comparative figures are given by the International Road Federation (IRF, 1996). This organisation uses three categories to indicate the yearly revenues from traffic taxes for The Netherlands. They distinguish a tax on purchase, a tax on ownership and a tax on use as can be seen from table 6. This total amount is comparable to the figures mentioned in table 4.

Table 6: Revenues from traffic taxes in 1996, amounts in million Dutch guilders

	Purchase	Ownership	Use	Total
The Netherlands	6953	5472	10215	22640

Source: International Road Federation, 1996

From these and above presented figures the absence of revenues from other schemes than taxes may be remarkable. When we look at the statistical information provided

by the IRF it appears that other countries implemented also funding schemes like road tolls or other fees. In The Netherlands these kind of funding mechanisms are not (yet) implemented.

1.3 Rail

In The Netherlands a distinction is made between the financing and maintenance of new rail infrastructure and operation of the existing infrastructure. The Dutch Railways (NS) is responsible for the operational side of the infrastructure (although recently also another company is active, see also section 3) while the Dutch government decides on the provision of new infrastructure. This makes it difficult to find statistical data covering both investment costs and operational costs together. Another fact which makes it more complex to find suitable data concerning costs and revenues, is the existence of some very large-scale projects (mega-projects) in The Netherlands at the moment. The investment costs for these projects - the Betuweroute and the HSL South (towards France) and East (towards Germany) - are most of the time mentioned separately in the data. These facts lead to the availability of different rail statistics. In the following, a broad, but structured, overview of the main available statistics concerning rail expenditures and costs will be given.

1.3.1 Rail costs and revenues

The first source that will be discussed here is the "Jaarbericht Vervoerend Nederland, 1998". This report is a yearly publication of the Ministry of TPWM of The Netherlands in which facts and figures of traffic, transport and telecommunication are presented. For the last five years the investments in construction and maintenance financed by the national government can be seen in table 7. This data is based on the MIT and the budget of the Ministry of TPWM (see section 1.1).

Table 7: Investments in the railway infrastructure (in million Dutch guilders)

	1995	1996	1997	1998	1999
Construction	948	1600	1848	585*	620*
Maintenance	1162	1248	1224	1338	1321

* exclusive investments in HSL and Betuweroute
Source: Ministry of Transport, Public Works and Water Management, 1998

The MIT provides, as mentioned earlier, an overview of revenues used to finance expenses concerning transport and infrastructure. For roads there appears to exist some revenues with regard to State roads. Concerning rail traffic this entry is missing. The only aspect, which is mentioned in the budgetary overview, are the above mentioned mega-projects (they claim about 0.8% of the MIT-budget). Obviously governmental rail expenses are almost completely financed by general funding mechanisms (like the already mentioned "Infrastructure Fund" and the "Fund for strengthening the Economic Structure" (FES)). This is to some extent caused by the fact that until now no fees are related to the use of the rail infrastructure. This changes in the year 2000 (see section 3.2). If we then look at the expenses side of the national government; it appears that the government invests around 2 billion Dutch guilders in 1999 in railways (excluding mega-projects, see table 8).

Table 8: Indicative overview of investments in railways and mega-projects by the Dutch government in the period 1999- 2002, in million Dutch guilders.

	1999	2000	2001	2002
Railways	2016	2040	2096	2205
Megaprojects	1755	1816	2097	2008

Source: The Ministry of Transport. Public Works and Water Management, 1999.

Statistics Netherlands provides us with the following data concerning rail traffic. The total costs of transportation by rail amounts to 3411 million Dutch guilders in 1997 (CBS, Statline, 1999). This consists for 67% of small maintenance work and 33% of capital investments. One remark has to be made since rail traffic is not only related to the Dutch Railways but it also encloses tram and underground. Another source of Statistics Netherlands refers to the investment costs into infrastructure. In 1995 1058 million Dutch guilders was invested into railway infrastructure (CBS, Statline, 1999). It is important to note that railway infrastructure is a completely different term than railway traffic as used by Statistics Netherlands.
Another source that collected these kinds of data is the annual report of the Dutch Railways. This annual report gives insight into the costs made for operating the infrastructure as the Dutch Railways is responsible for this part. It is now possible to make a distinction between passenger traffic and freight traffic. The Dutch Railways has different holdings (four in total), two of them are freight and passengers. The annual report provides us with different financial data of the company. We confine ourselves to the expenditures and proceeds (see table 9).

Table 9: Proceeds and expenditures of the Dutch Railways for freight (NS Cargo) and passengers (NS Reizigers) in 1998, in million Dutch guilders.

Holding	Proceeds	Expenditures
NS Reizigers	2666	2304
NS Cargo	343	345
Dutch Railways total	5489	5197

Source: Dutch Railways, 1999.

2. Current or planned infrastructure charging schemes for road and rail

The government stimulates the use of public transport and most public transport services are subsidised. The only public transport charging scheme in The Netherlands is the “strippenkaart”, a kind of pre-paid ticket that can be used in all public transport modes (for trains only within urban areas) throughout the country. The whole country is divided in zones (bigger cities typically have more than one zone) and – in addition to one starting “strip”- one has to pay one “strip” for each zone one wants to travel through. A strippenkaart contains 15 or 45 strips. In addition, the former1 y public Dutch Railway Company of course has their own ticket system.

There are three types of road charging schemes proposed and partly introduced in The Netherlands. The first type consists of charging schemes to reduce mobility in

general. The second is focussed on congestion in urban areas and the third concerns charging schemes on highways. Furthermore, there are / have been a few toll bridges and tunnels in case of financing by private companies.

2.1 General road charging schemes

The charging schemes to reduce mobility in general try to combine multiple policy targets, in particular reduction in pollution and reduction of congestion. However, the first general scheme to reduce mobility in The Netherlands was instigated by the oil crisis in the early seventies. Due to the scarcity of fuel, a voucher system was introduced to limit the distribution of fuel. After the voucher system was abolished car-free Sundays were introduced for a limited period.

The fast rise in car usage in the seventies and eighties did not keep level with the extension of the road network and has led to increasing congestion on highways and within urban areas. Furthermore, it has led to increasing environmental pollution.

One of the instruments used for coping with the increasing mobility in general is the "variabilisation" of usage costs. In The Netherlands this is reached by increasing the fuel tax. As a consequence the fuel price in The Netherlands is considerably higher than in the neighbour countries Germany and Belgium. This leads to fuel fetching trips in the Dutch border regions. It is estimated that annually about 325 million litres of fuel -about 5.6 % of total Dutch fuel purchases – are purchased abroad (NEI, 1997). A proposal of the Ministry of Transport, Public Works and Water Management (TPW) to introduce a system of spatial graduation of fuel taxes – in which the taxes are low in border regions and increase with the distance to the border (so the highest taxes are raised in the most congested Randstad urban area) – have been prevented by the European Commission. Ongoing variabilisation of usage costs by a further increase of the fuel taxes seems to be no option as long as it is a Dutch fuel tax increase without a similar fuel tax increase in the neighbour countries.

The fuel fetching trips as a consequence of the price difference with neighbour countries are not the only disadvantage of the variabilisation of usage costs via fuel tax. Fuel tax does not discriminate for time, place and speed. Time and place discrimination is needed to reduce congestion: the government wants to reduce the car usage in particular in the peak hours and in particular in urban areas. Environmental pollution of car usage is strongly correlated with the speed.

Given the limitations of variabilisation by fuel taxes, the government is currently developing a system of kilometre charges. The system of kilometre charge will be able to discriminate for time, place and speed of car usage. To be able to use such a highly sophisticated system as a kilometre charge it will be necessary to develop an automated vehicle registration system. The implementation of kilometre charge necessitates a major adjustment of the Dutch car park. In all vehicles, the registration system should be built in. This is not the only disadvantage of the system. There are also legal objections caused by the privacy rights of car users. An advantage of a kilometre charge is that the fuel tax can be lowered to a level comparable as is levied in the neighbour countries and this can solve the problem of fuel fetching cross border trips. It is expected that the first plans of kilometre charge will be launched in the first document (by tradition called Policy Incentives) of the National Traffic and Transport Plan of the Ministry of TPW what is expected to see daylight by the end of this year.

2.2 Urban charging schemes

In The Netherlands, inner city traffic congestion is often dealt with using a mixture of parking charges and public transport subsidies, alongside spatial planning policies. In the early eighties the Dutch Railway Company started with the park and ride system at suburban stations: the Railway Company offered free parking places for commuters travelling further by rail. A more recent example is the construction of transferia in the outskirts of main urban areas where car owners can park at lower fees as the inner city fees and often receive reduced public transport fares for further urban transport. Parking fees within urban areas differ by neighbourhood. An illustrative overview of the fees and licenses for inhabitants and companies in Amsterdam is given in table 9.

Table 10: Parking-fees and licenses in Amsterdam (in Dutch guilders)

	Inner city	Urban areas	Suburban areas
Parking fees (per hour)			
Monday-Saturday 9.00-19.00	5.00	3.00	1.75
Monday-Saturday 19.00-23 .OO	3.00	3.00	
Sunday12.00-23.00	**3.00**		
Licenses (for three months)			
Inhabitant	93.15	53.55	40.95
Company	186.30	107.10	81.90

Source: Parkeerbeheer Amsterdam, 1999

2.3 Highway charging schemes

Most plans for charging schemes to tackle the congestion on highways never came further than the drawing table of the Ministry of TPWM. There was not enough political commitment to support the systems and they suffered from great resistance from various parts within the society.

In a chronological order the Ministry of TPWM started to develop plans for toll squares (tolpleinen) at the end of the sixties. At several points in the highway network – in particular in the Randstad urban area – toll would have to be paid in conformity with the French peage system.

In the Second Traffic and Transport Structure Plan of the Ministry of Transport Public Works and Water Management (1989) the so-called Spitsvignet was proposed. Car drivers would have to buy the right to pass a specific cordon during peak hours. In most cases the cordons were the boundaries of the major cities in the Randstad (Amsterdam, Rotterdam, The Hague and Utrecht). Also this system was never introduced.

There has been one pilot project considering a lane reserved for car-poolers. This project was on the Al (Muiderberg-Amsterdam). In the centre strip of the Al one extra lane was constructed on which only cars with at least one passenger were allowed. During the morning peak hours the lane was open in the direction of Amsterdam and in the afternoon peak hours in the direction of Muiderberg. The pilot project started in 1995 but failed on legal groundings. It appeared legally not allowed to exclude cars without passengers from the use of the car-pool lane.

Currently there are two types of charging schemes under consideration. The government is preparing the introduction of an electronic charging system on the

highways, called “Rekening Rijden”. In the morning peak hours cars passing underneath a gate are electronically charged either immediately by an in-vehicle registration account or they receive a bill at their home address. The in-vehicle systems costs 5 Dutch guilders per passage and the bill at the home address 7 Dutch guilders. Those tollgates are to be constructed in cordons on all types of roads entering the major cities in the Randstad. At the moment a pilot project is held on the Al2 highway (Utrecht – The Hague) to test the technical reliability of the system. If this test succeeds the government intends to introduce this system in advance of the more sophisticated system of kilometre charges.
The Chambers of Commerce disagree with the proposed system of Rekening Rijden. They prefer a system of target groups. During peak hours only business travellers and freight transport should be allowed on the highways. In other words: commuters and social traffic should be excluded from the highway during peak hours. The political acceptability of this plan is low, however. An alternative proposed by the Chambers of Commerce is the introduction of pay-lanes. However, in that situation the government has to guarantee the free flow of traffic on those pay-lanes.

2.4 Tolls

In The Netherlands there are a few examples of tolls at infrastructure constructed by private companies. These tolls remain until the users have repaid for the costs of the infrastructure construction (at an interest rate agreed upon between the government and the private financier). In The Netherlands three infrastructure projects have been fully financed by tolls: Prins Willem Alexander bridge in Tiel, the Zeelandbrug in Zeeland and the Beneluxtunnel in Rotterdam. The Kiltunnel near Dordrecht is still tolled. The toll for a passenger car is 3.50 Dutch guilders, the toll for lorries is unknown. A final private financed infrastructure project in The Netherlands is the Wijkertunnel near Beverwijk. In this case the government is paying for each passage. Instead of financing the tunnel itself the government allowed a private financier to construct the Wijkertunnel and agreed upon a repayment per passage for a certain period of time given an expected number of passages. Unfortunately – from the governments perspective - the estimation of the number of passages was too conservati ve, and now the government is paying too much.

3 Rail liberalisation

3.1 Current situation

The implementation of the liberalisation of the rail transport is in full development in The Netherlands. The first step towards the privatisation of the Dutch Railway Company (NS) was taken in 1995. The Dutch Railway Company was split up in a number of task forces that will become governmental agencies in 2000 and a number of NS-holdings that together form the to be privatised Dutch Railway Company. Until January 2000 the task forces are still part of the NS-organisation. After January 2000 the task forces will be independent government agencies. Until January 2000 the hybrid situation remains that although the task forces are part of the NS organisation the government (the Ministry of TPWM) is their commissioner. Due to this rather unclear separation between the NS-holdings and the task forces there are a number of serious problems in the bilateral relationships between the NS-holdings, the task

forces and the Ministry of TPWM. All employees of the task forces are former NS-employees. This creates a situation of uncertainty and distrust. Are the employees of the task forces still loyal to their former employer, the NS, or are they already anticipating on their future independent position as a government agency and act strictly in line with formal governmental rules?

The task forces are:

- Railned: this organisation is responsible for the safety on the rail network and for the innovations of the rail network. In addition - most important - it gives long term concessions to private operators for the use of the network;
- Railinfrabeheer: this task force is responsible for the construction and maintenance of the rail network;
- Traffic control: this organisation is responsible for the daily use of the rail network.

The Dutch Railway Company consists of four holdings:

- NS Reizigers: this holding is responsible for passenger traffic;
- NS Cargo: this organisation is responsible for freight traffic;
- NS Stations: this holding is responsible for the development of the railway stations (shops, parking of cars and bicycles etc);
- NS Vastgoed: this organisation is responsible for the real estate of the Dutch Railway Company.

In 1995 the NS passenger services were heavily subsidised by the government. In the following years the subsidies are to be reduced to zero in the year 2000. However, there are over 30 regional non-remunerative lines for which the government is willing to pay to maintain a certain level of service (contract lines). Those contract lines are partly served by the NS and partly by regional operators (in which the NS is a minor participant) who get paid for the services offered by the central government. For example NS-Reiziger receives a yearly amount of 150 million guilders for their services offered on contract lines. The services on the intercity network - the core network – is in hands of NS-Reizigers until 2008. NS-Reizigers has to provide services of both intercity as well as stopping trains on these tracks in frequencies as agreed with the central government. So although NS-Reizigers has got the status of a private company it still has to reach agreement with the central government about the frequencies – and tariffs – of the services provided on the core network. Furthermore, the central government has formulated safety standards and tries to influence the reliability of the services by claiming that 96 % of the services should be provided with less than five minutes delay.

Since the central government remains responsible for the construction and maintenance of the rail network, users of the rail network have to pay a user fee from January 2000 onwards. The charging system and the height of the fee that will be implemented on the core – intercity - network are still in preparation both for passenger and cargo trains. Before November 1999 there will be a public announcement – an Order in Council – about the Ministerial Resolution Users Fee Railroad Infrastructure in the Dutch Staatscourant. This Order in Council will explain the *charging system* to be introduced in January 2000. This Order in Council will be followed in December 1999 by a Ministerial Measure in which the *height of the fees* will be announced. Both the Order in Council and the Ministerial Measure will become public available. Since the railway system resorts under the Directorate

General Passenger Transport, this Directorate is responsible for the system and the fees for both passenger and cargo trains.

3.2 New entrants

In both passenger and freight transport there have been new entrants.
Considering passenger transport there are currently two regional operators active: Noordned in the northern part of the country and Synthus in the eastern part of the country. A third regional operator will enter the market for the north-western part of the country in the near future. These regional operators offer only stopping train services on tracks on which no intercity services are running. As already mentioned, the intercity services and all stopping train services on these tracks are given in concession to NS-Reizigers until 2008. There was only one exception and that was Lovers Rail (the French SNCF was a main shareholder in this railway company). This company had concessions to operate services on parts of the intercity network. Although Lovers Rail had concessions for three tracks they only operated services on one track. Lovers Rail stopped their activities when the SNCF withdraw as shareholder in September 1999.
For freight transport there are two new entrants on the net. ACTS (Automatic Container Transport Systeem) and Short Lines both running a few shuttle trains per week. A more important development is the joint venture between DB Cargo (94 % of the shares) and NS Cargo (the remaining 6 %).
To sum up, the new entrants in passenger transport operate on non-remunerative tracks in the periphery of the country (the contract lines) and the new entrants in freight transport provide marginal services. This is no wonder since it is difficult to enter the market. Companies that want to enter the market require a large organisation including front and back offices. Moreover, they have to invest in rolling stock and their requirements - considering safety, signalling, voltage etc - to run on Dutch tracks, require employees with the by government requested knowledge of the specific tracks and so on. For instance, in The Netherlands trains are running on 1,500-Volt direct current, whereas in most neighbour countries trains are running on 25,000-Volt alternating current.

3.3 Current issues

One of the current issues is the transformation of the Dutch railway network from 1,500-Volt direct current towards 25,000-Volt alternating current on the international tracks. This is a major issue since the government is responsible for the rail network infrastructure whereas the operators (NS-Reizigers and NS-Cargo) are responsible for the rolling stock. The big argument is on who has to pay for the modification of the rolling stock of the operators when the government changes the voltage. In the short term it is planned that the high-speed track running from Amsterdam towards Brussels and the freight track to Germany (the Betuwelijn) will be equipped with a 25,000-Volt alternating current system. This will stimulate the entrance of new -foreign - operators on these international lines. However, Railned is also planning the introduction of a new safety system. In this system the safety signalling is within the trains instead of alongside the track. Given the speed of a train and the speed of the train in front the minimal distance between the two trains is calculated. This floating safety system has to be installed in all trains entering the Dutch rail network. This will negatively influence the opportunity to enter the Dutch railway market.

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